

## *ACACIA SYMONII*, A NEW SPECIES FROM THE NORTH-WESTERN REGION OF SOUTH AUSTRALIA

D. J. E. Whibley

State Herbarium, Botanic Gardens, North Terrace,  
Adelaide, South Australia 5000

### Abstract

A new species of *Acacia* (Leguminosae; Mimosoideae), *A. symonii*, is described and illustrated from South Australia. The species belongs to series *Juliflorae* sensu Bentham (1864). Further relationship is uncertain but the resemblance to *A. longissima* H.Wendl. is discussed.

### *Acacia symonii* Whibley, sp. nov.

*Frutices* elati vel *arbores* parvae, 3-4(-8) m altae; ramuli teretes, apicaliter resinocostati. *Phyllodia* linearia, 8-14 cm longa, 1.5-3 mm lata, non rigida, plana, sparsim et minute appressipubescentia; nervi longitudinales resinosi et distantes 3 (usque ad 5 in phyllodia lata), nervus centralis normaliter prominentior quam ceteri; glans basalis 1-2 mm super pulvinum. *Inflorescentiae* simplices, axillares, plerumque solitariae; spicae nonnihil interruptae ca 15 mm longae. *Flores* 5-meri; calyx longitudine quinta parte corollae. *Legumina* linearia, 3-6 cm longa, ca 2 mm lata, chartacea, pallide brunnea, glabra. *Semina* in legumine longitudinalia. (Fig. 1).

*Type*: D. E. Symon 3327, South Australia, North-Western Region, Everard Ranges creek line about Mt Illbillie, graceful shrub to 2 m, 17.ii.1965 (holotype AD 97934152; isotypes ADW, BRI, K, MEL, PERTH).

This species is named in honour of Mr David Symon, Senior Lecturer, University of Adelaide, Waite Agricultural Research Institute, and the first person to collect this species.

Tall *shrubs* or small *trees* 3-4(-8) m high, with a single trunk or several stems ascending from ground level; *branchlets* terete, apically resinous-ribbed with a sparse appressed pubescence between them, reddish-brown but becoming grey with age. *Phyllodes* linear but tapering slightly at each end, 8-14 cm long, 1.5-3 mm broad, straight or slightly curved, not rigid, flat, viscid when young, glabrous to sparsely and minutely appressed-pubescent; apices delicately hooked; longitudinal nerves resinous and distant, 3 (to 5 on broad phyllodes) with the central one normally more pronounced than the rest, margins resinous and nerve-like; *gland* basal, 1-2 mm above the pulvinus, lamina swollen about gland, usually with a raised resinous rim and a distinct central orifice; pulvinus short, transversely wrinkled. *Inflorescence* simple, axillary, usually solitary; spikes interrupted, yellow, ca 15 mm long; peduncles minutely pubescent, 3-4 mm long; receptacles glabrous; bracteoles 0.4 mm long, hood-shaped, almost sessile, thickened abaxially near their bases. *Flowers* 5-merous, slightly viscid, sessile or minutely pedicellate; calyx ca  $\frac{1}{5}$  the length of corolla, divided about  $\frac{1}{3}$  into broad-triangular minutely ciliolate lobes; petals free, ca 2 mm long, glabrous, finely 1-nerved; ovary white-pubescent. *Legumes* linear, 3-6 cm long, ca 2 mm broad, straight or slightly curved, acute at both ends, flat but raised over and slightly constricted between seeds, firmly chartaceous to slightly cartilaginous, light brown, glabrescent, obscurely reticulate; margins yellowish. *Seeds* longitudinal in legume, obloid, light brown, shiny, 3 mm long, 1.5 mm broad; pleurogram obscure, open towards hilum; areole U-V shaped, ca 0.5 mm long; funicle short, folded once or twice and thickening into a whitish aril.

### *Distribution* (Map 1)

South Australia; known only from two localities in the North-Western Region around Victory Basin in the Everard Ranges, and from Mt Lindsay in the Birks Gate Range. It is possible that further collecting could extend the range into Western Australia and/or Northern Territory.

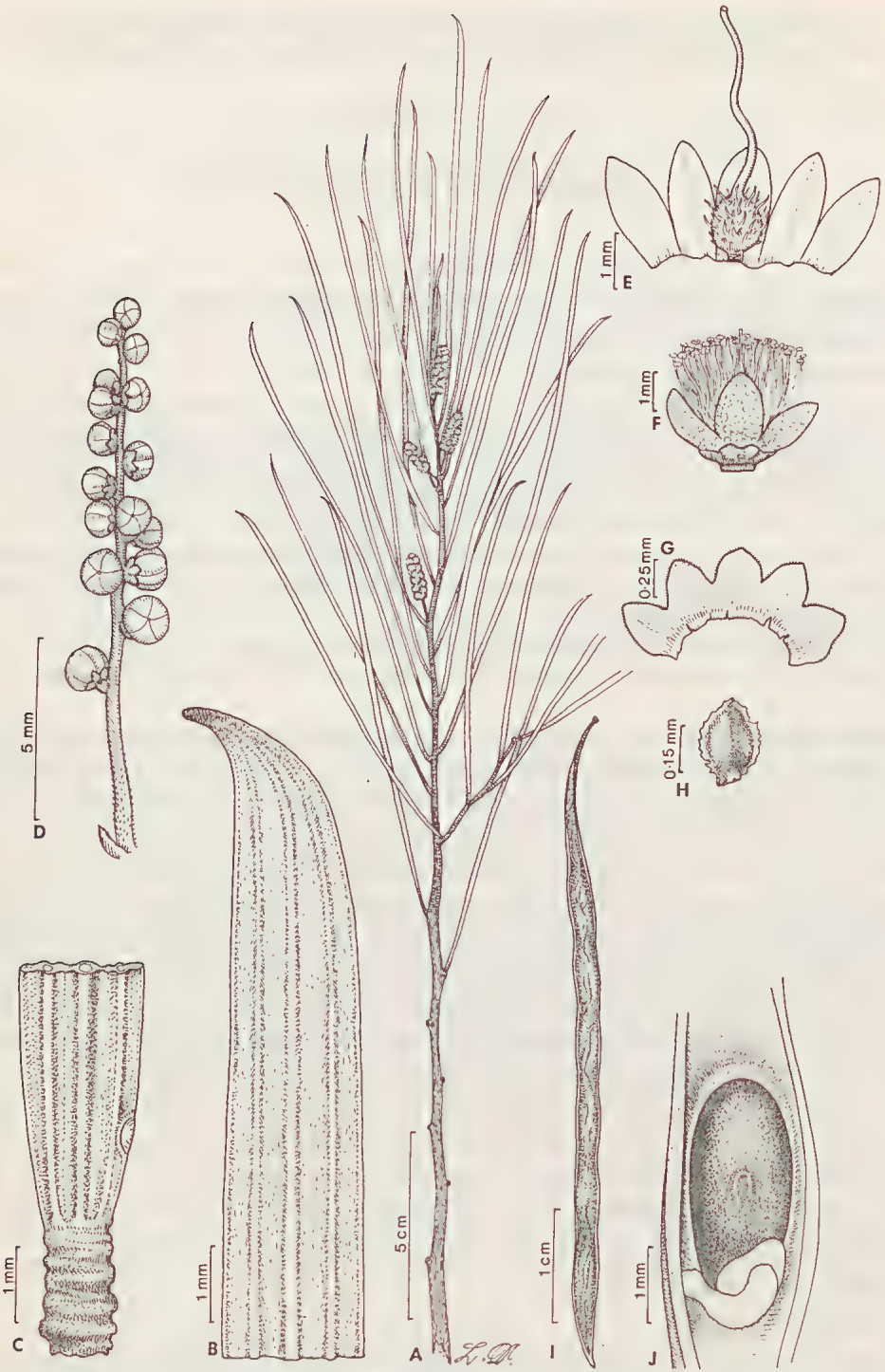
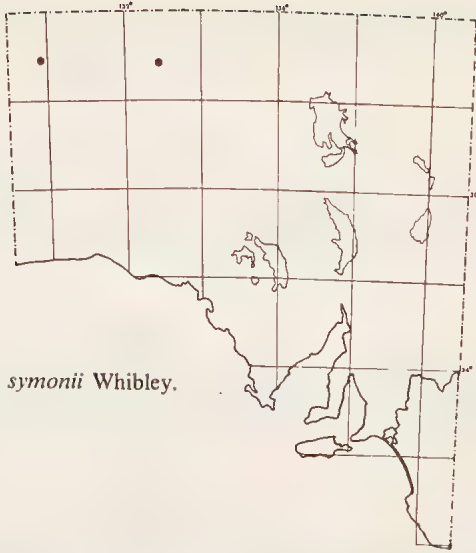


Fig. 1. *Acacia symonii* Whibley. A, flowering twig; B, upper portion of phyllode; C, lower portion of phyllode with pulvinus; D, inflorescence; E, portion of open flower with ovary; F, flower; G, calyx; H, bracteole; I, legume; J, seed and funicle. (Symon 3327, AD, holotype)



Map. 1. Distribution of *Acacia symonii* Whibley.

### Habitat

On hillsides amongst granitic rocks associated with *Acacia olgana* Maconochie.

### Flowering and fruiting period

Herbarium material of flowering specimens has been collected in August and February, with a flowering and fruiting specimen collected in December.

### Affinities

The precise relationship of *Acacia symonii* is obscure. According to Bentham's (1864) classification *A. symonii* would be placed in the series *Juliflorae* but it is difficult to place satisfactorily in any of the subdivisions of this series. On most characters it could best be aligned with *Rigidulae*, *Tetramerae* or *Stenophyllae* but with none of these does it agree in all respects.

Although its relationship is uncertain at this stage, in general appearance *A. symonii* most closely resembles *A. longissima* (*Tetramerae*) which occurs in Qld and N.S.W. Both species have linear, non-rigid phyllodes with delicately hooked apices, interrupted spikes and very short calyces. *Acacia longissima* differs in that its phyllodes have a prominent non-resinous central nerve and several other less prominent and likewise non-resinous nerves, its spikes are 2-5 cm long and its flowers are 4-merous and pale yellow.

### Specimens examined

SOUTH AUSTRALIA: North-Western Region. *Shurcliff* s.n., Everard Ranges, 8 m trees, grove on north facing slope of southernmost range of hills above Victory Basin, 16.xii.1975 (AD); *Evans & Reid* s.n., Mt Lindsay, 26.vi.1967 (AD); *Stove* 349, Mt Lindsay, near summit of southernmost ridge ca. 1/2 km south of Watarunya Rockhole, 31.viii.1978 (AD); *Whibley* 6580 & 6581, Mt Lindsay, eastern slopes of Mt Lindsay proper about gorge running south-east from summit, 31.viii.1978 (AD); *Symon* 2594, valley on south side of Mt Lindsay, 6.viii.1962 (AD).

### Acknowledgements

I am grateful to Bruce R. Maslin for assistance during the preparation of this paper; Dr J.P. Jessop for the Latin diagnosis and Mr L. Dutkiewicz for preparing the illustrations.

### Reference

Bentham, G. (1864). "Flora Australiensis" 2:302 (L. Reeve: London).